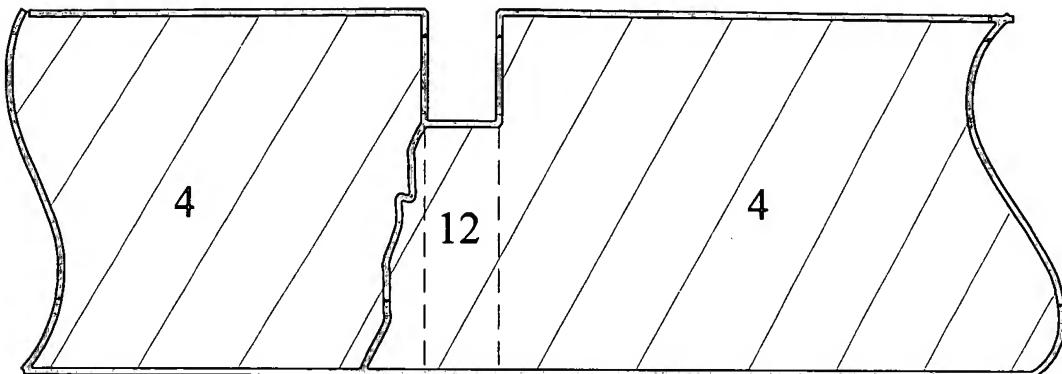


R E M A R K S

Claims 1-8, which have all been canceled herein, were rejected under 35 U.S.C. §103 as obvious over Barth *et al.* U.S. Patent No. 4,185,939 in view of Jansson *et al.* U.S. Patent No. 5,108,222, and also as obvious over Barth *et al.* in view of WO 93/07339.

New claims 9-16 have been submitted herewith. These claims are supported by the specification and/or drawings as originally filed, which clearly show each claimed feature. It is respectfully submitted that these claims are allowable over any combination of Barth *et al.* with Jansson *et al.* or WO '339.

That is, in the suggested combinations, even if appropriate, the connecting bridges 12, 18 of Barth et al. would be susceptible to cracking anywhere along their span length. Moreover, given that corners are often stress points, it seems likely that the connecting bridges 12, 18 may often be broken right next to the individual stones 4, and in some instances such breaks might extend beneath individual stones rather than being kept in the connecting bridges 12, 18 as illustrated by the following figure:



This is true of both the large cross-section and small cross-section bridges (12, 18, respectively) of Barth *et al.*

Breaks such as illustrated could tend to detrimentally weaken the load bearing portion of the structure (*i.e.*, the stones 4) and/or may cause the stones 2 to be more susceptible to undesirable movement or shifting due to an uneven bottom.

Further, it should be appreciated that if the break were to be angular (such as illustrated in the above figure) and not generally vertical, the combination of Barth *et al.* with the geogrids of Jansson *et al.* or WO '339 would result in a structure in which the tapered surfaces would be held adjacent one another by the geogrid. Over the course of years, under varying environmental conditions, any relative lateral movement would thus not only change the spacing of the stones, but would also tend to slide one up relative to the other one so as to potentially provide an undesirable

uneven upper surface. Further, it should be appreciated the upward movement of a stone in this manner would also tend to move the stone away from the full support of the earth beneath it, whereby some stones may come to be principally supported by that portion of its side which rests on the connecting bridge. Such a support could be relatively unstable and could further result in stress points which are more susceptible to damage.

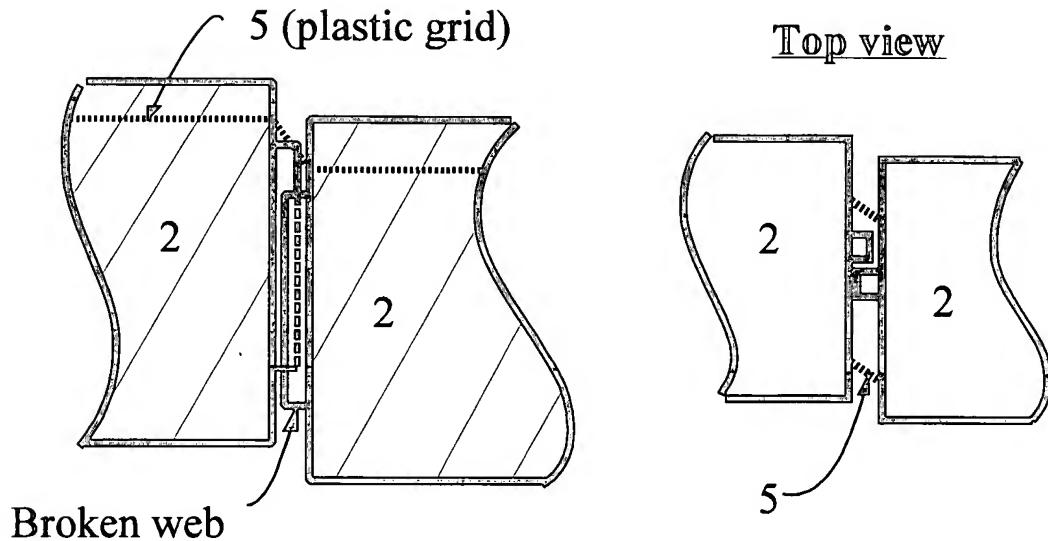
Still further, in many instances homeowners are required to provide such structures to enable emergency vehicles to be able to pass over a portion of their property without being bogged down, but in many of those instances, the homeowners aesthetically prefer to hide the structure, such as by growing grass throughout it. Where that is desirable (something which is likely not desirable with the Barth *et al.* ground covering slab), an unbalanced location of the cracks could result in an unbalanced growth of such landscaping which might tend to undesirably highlight rather than hide the structure in the ground. Still further, raised edges hidden by grass may be dangerous to persons walking over it, as they may unexpectedly encounter a hidden raised stone edge when walking over the area, and possible stub or break a toe or trip and fall.

By contrast, with the present invention as disclosed and claimed, the relatively thinner portions are configured so as to contain the break, with the holes defining weakened areas which assist in ensuring that the breaks are spaced from the thick portions defining blocks. As a result, the structural integrity of the weight

bearing blocks is protected, and their long term ability to function as desired will be enhanced over the suggested combinations.

In addition, a reliably rigid structure is obtained while still having the above described advantages. The bridges 12, 18 of Barth *et al.*, particularly bridges 12 (see Fig. 2), and the narrow links or webs in WO '339 (e.g., 15 in Figs. 1-4, and 102 in Figs. 27-29), will not provide the desired rigidity, nor can they be as easily and reliably manufactured using concrete as can this aspect of the present invention.

Moreover, with such narrow broken connections as in WO '339 particularly, the paving elements 2 are much more susceptible to undesirably uneven floating where the only restraint between such elements 2 is the flexible and relatively weak plastic grid 5 (*i.e.*, if broken narrow webs move laterally out of contact with one another, the elements may be undesirably movable relative to one another in a vertical direction; for example, the elements 2 may move next to one another with the grid element vertically between them as illustrated by the below side cross-sectional and top views:



By contrast, with the fully extending relatively thinner portions of the present invention, such an undesirable result is virtually impossible given the near impossibility that the broken halves of the relatively thinner portions will not to some extent engage each other to maintain generally the desired spacing between the stones.

It will also be readily recognized by paving stone manufacturers, for example, that while the webs 15, 102 in WO '339 may theoretically provide some advantage in controlling where breaking occurs, it will not provide the structural strength of the present invention, nor will it be easy to manufacture given the clear need to form very narrow webs (including fault lines 16, 103). If it cannot be readily manufactured at reasonable cost (e.g., if concrete may not be reliably and consistently poured and solidly cured in those narrow webs across the entire mat), even the lesser theoretical advantages of WO '339 may be unobtainable.

Further, where the breaks are recited as being generally vertical, the possible problems with blocks being uneven, unevenly supported, and/or more susceptible to stress deterioration over time can be avoided.

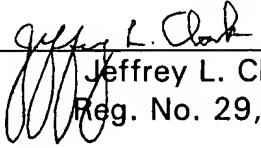
Still further, the central orientation of the breaks assists in providing a structure in which grass may grow up relatively uniformly throughout the mat, and thereby achieve the frequent goal of partially hiding such mats.

The invention as variously claimed thus is advantageous over any combinations of Barth *et al.* and Jansson *et al.* or WO '339.

For the above stated reasons, claims 9-16 are submitted to be allowable. Early notification to that effect is respectfully requested.

Respectfully submitted,

WOOD, PHILLIPS, KATZ,
CLARK & MORTIMER

By _____ 

Jeffrey L. Clark
Reg. No. 29,141

June 14, 2004

500 West Madison Street
Suite 3800
Chicago, IL 60661-2511
(312) 876-1800